

<https://helda.helsinki.fi>

---

## The transition from university to working life. An exploration of graduates' perceptions of their academic competences

Tuononen, Tarja

Routledge - Taylor & Francis Group

2017-04

---

Tuononen , T , Parpala , A & Lindblom-Ylänne , S 2017 , The transition from university to working life. An exploration of graduates' perceptions of their academic competences . in E Kyndt , V Donche , K Trigwell & S Lindblom-Ylänne (eds) , Higher Education Transitions : Theory and Research . New Perspectives on Learning and Instruction , Routledge - Taylor & Francis Group , Abingdon, Oxon , pp. 238-253 .

---

<http://hdl.handle.net/10138/308628>

---

acceptedVersion

---

*Downloaded from Helda, University of Helsinki institutional repository.*

*This is an electronic reprint of the original article.*

*This reprint may differ from the original in pagination and typographic detail.*

*Please cite the original version.*

Tarja Tuononen, Anna Parpala and Sari Lindblom-Ylänne

## **The transition from university to working life**

### **- An exploration of graduates' perceptions of their academic competences**

#### **Introduction**

Employability can be determined as a combination of individuals' characteristics and the state of the labour market (Brown, Hesketh & Williams 2003). Thus, employability includes individual factors, personal circumstances and external factors (McQuaid & Lindsay 2005). It can also be defined only from an individual point of view emphasising the achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen professions (Knight & Yorke 2002, 2003). Most research on the topic has explored students' employability and transition from university to work by concentrating on the relationship between the output of academic education and the demands of working life, as well as employers' expectations (e.g. Kavanagh & Drennan 2008). Moreover, at the institutional level, the employability of graduates is often measured by graduate employment rates (e.g. Harvey 2001). However, to find employment after their university studies, graduates must be able to identify their competences and be confident that they will succeed in working life. It is therefore important to explore the transition from university to work from the graduates' perspective as well as at the level of the individual (Johnston 2003). Knight and Yorke (2002) have suggested a model for excellent employability. The model consist of four interrelated components: understanding, skills, efficacy beliefs and metacognition (i.e. USEM model). In line with the USEM model, Bennett, Dunne and Carré (1999) developed a model of course provision to develop students' generic skills and employability. It consists of both disciplinary content and skills and generic skills, but also workplace experience and workplace awareness. In this study, we use the concept 'academic competences'; these include academic skills such as critical thinking, collaboration and

communication skills, and problem-solving skills (e.g. Strijbos, Engels & Struyven 2015). Such skills can be developed and utilised in both university and work contexts (Bennett, Dunne & Carré 1999; Greenbank, Hepworth & Mercer 2009). Academic competence can therefore be defined as a multidimensional construct of skills, attitudes and behaviours, including academic skills, study skills, academic motivation, interpersonal skills and academic self-conceptions (DiPerna & Elliott 1999). In line with Knight and Yorke (2002) and Bennett, Dunne & Carré (1999), the aim of the present study is to capture the individual-level variation in graduates' evaluations of their academic competences, their confidence in becoming successful in working life, and the usefulness of work experience to their studies during the period of transition to working life, in order to gain deeper insight into the employability of graduates. Next, the elements of the USEM model and the model of Bennett, Dunne and Carré (1999) are discussed in more detail, starting from 'understanding and skills'.

### ***Understanding and skills***

Previous research has explored students' and graduates' assessments of the skills they have developed during their university education. Graduates from political science have most often mentioned critical thinking as well as analytical and communication skills as being the most important, whereas psychology graduates have mentioned the ability to reflect (Abrandt Dahlgren et al. 2006). Students have perceived oral and written communication skills, critical thinking skills, as well as problem-solving and team-work skills to be the ones that have developed most during their university studies, and have considered them to be more important for their future careers than content knowledge (Crebert et al. 2004). Most graduates have also perceived that generic skills have directly contributed to their ability to find employment after graduation. Graduates' competences, for example working independently, using time effectively and meeting challenges, were positively related to subjective vocational success and future salary (Braun,

Sheikh & Hannover 2011). However, there is also evidence of students failing to understand the importance of developing generic skills. In one study, only one in eight students mentioned that engaging in group work can improve employability (Greenbank, Hepworth & Mercer 2009). Similarly, some students have not seen the acquisition of transferable skills as a goal in itself (Gedye, Fender & Chalkley 2004).

Work experience plays a crucial role in developing skills consequently in the development of students' employability (Bennett, Dunne & Carré 1999). Students whose education has included gaining skills during work practice have been better able to see the direct relevance of such skills to their future employment (Dunne, Bennett & Carré 2000) and to find employment after graduation (Mason, Williams & Cranmer 2009). Similarly, students have perceived both academic studies and internship to be helpful in developing their competences, but have seen internship as more important than studies (Arnold et al. 1999). More precisely, communication skills and teamwork skills (Sleap & Reed 2006; Vaatstra & De Vries 2007; Crebert et al. 2004), problem-solving skills (Crebert et al. 2004) and the ability to link theory to practice (Trede & McEwen 2015; Shaw & Ogilvie 2010; Smith et al. 2007) have been perceived as developing particularly at work.

### ***Efficacy belief and metacognition***

Graduates need to have strong self-efficacy beliefs, in other words, a person's belief in his/her ability to succeed in a particular situation (Bandura 1977). Self-efficacy beliefs play a key role in career choice and development (Bandura 1997). Graduates with high self-efficacy beliefs concerning their ability to search for and find a job have had more interviews and job offers than graduates with lower self-efficacy beliefs (Moynihan et al. 2003). In addition, self-confidence has been found to develop in the context of both university (Sleap and Reed 2006) and work

(Ehiyazaryan & Barraclough 2009; Shaw & Ogilvie 2010). Further, students with work experience have been more confident about entering working life and have had higher expectations of job security (Oliver 2011). We take the position that the concept of self-confidence in this particular context resembles self-efficacy beliefs, as both can reflect a belief in one's employability and success in working life.

Metacognition as a part of employability means that a graduate needs to be aware of his/her learning process and be able to reflect on his/her own action (Knight & Yorke 2003).

Metacognitive skills are important for analysing one's competences and skills. This is especially true during the transition phase when seeking employment, but it is also important for professionals in order to manage work demands (Knight & Yorke 2003). The relation between metacognition and work can be bidirectional. Work experience has been found to have a positive influence on students' ability to articulate their skills and knowledge, and how they see their skills being transferred to the work context (Ehiyazaryan & Barraclough 2009). Thus, many students struggle with metacognitive skills and many perceive reflection as difficult (Smith et al. 2007; Lindblom-Ylänne 2003). It is important to better identify and understand these students.

Studies concerning the transition from university to working life taking the graduates' perspectives into account have mainly explored perceptions of competences and employability using quantitative surveys (e.g. Braun, Sheikh & Hannover 2011; Crebert et al. 2004). We argue that to be able to examine graduates' ability to reflect on their competences, we should explore how they are able to identify these competences themselves. Thus, there is a need for qualitative research on graduates' self-evaluations of their knowledge and skills, self-efficacy and metacognition as well as on their work experience and workplace awareness. The present study

aims, firstly, to capture the variation in graduates' evaluations of their competences and, secondly, explore this variation at the individual level in order to create graduate profiles.

## **Method**

### ***Participants***

A total of 58 master's graduates from the University of Helsinki participated in the study. The majority of the participants were female (76 %,  $n = 45$ ). Ages varied from 25 to 47 years ( $M = 29$ ). Most of the graduates were from the Faculty of Arts 36% ( $n = 21$ ), Faculty of Behavioural Sciences 19% ( $n = 11$ ) and Faculty of Social Sciences 17% ( $n = 10$ ). All had acquired work experience during their studies, and most (75%) had work experience related to their studies. Altogether 33 (57%) graduates had worked both during semesters and during summer. Nineteen (33%) had only worked during semesters; of these, seven had worked full time. One student had only worked during holidays. Most of the graduates 25 (43%) had worked less than 20 h per week, eleven (19%) had worked 20–34 h and 22 (38%) had worked weekly more than 35 h.

### ***Interviews***

The participants had received a questionnaire when they graduated in the spring of 2013. The questionnaire is used in another of our studies (Tuononen et al. 2015), where it is explained in greater detail. In the survey, the graduates were asked to provide their contact information if they were willing to participate in the study. Those who volunteered were then contacted by email, and interviews were conducted by the first author. The semi-structured interviews focused on graduates' perceptions of their academic competences, and particularly on how, in the opinion of the graduates, the competences had developed during their studies. The interviews also dealt more broadly with the graduates' studying and learning at the university. Moreover, the graduates' work

experience alongside their studies, their work situation at the time of graduation and their thoughts about their future success in working life were covered as well. The interview themes were formulated on the basis of the elements of the USEM model (Knight & Yorke 2002). Clarifying questions were asked if the responses were unclear or less detailed. The interviews lasted from 24 to 99 minutes, and were recorded and transcribed verbatim. The participants' anonymity was ensured by giving them ID numbers.

### *Analysis*

The interviews were analysed using inductive content analysis (Elo & Kyngäs 2007). The first phase of the analysis was carried out at the phenomenon level, and each theme (academic competences, confidence in success in working life, and usefulness of work experience) was analysed separately. The process of inductive content analysis includes open coding, creating categories and abstraction (Elo & Kyngäs 2007). First, the graduates' evaluations of the themes were listed and coded. Categories were then created by combining qualitatively similar descriptions, and finally, main categories were created and named at a level of abstraction. The analysis of the interviews was conducted by all authors. The first author independently analysed the interviews by reading them and identifying initial variations. The third author then analysed 15 randomly selected interviews (26% of the 58 interviews). The first and third authors identified the same main categories but detailed criteria for categorisation were discussed together by all three authors and some categories were redefined. Following this, quotations from the interviews were selected to describe each category, and the second author read selected quotations to validate the analysis. All unclear cases were analysed and discussed together. After a closer analysis, most of the unclear descriptions could be classified in one of the existing categories.

In the second phase the aim was to create graduate profiles using a person-oriented approach. This approach sees the individual as an organised whole and takes holistic view of an individual's development (Bergman & Magnusson 1997). Therefore in the present study each graduate's descriptions and evaluations were analysed as one unit. Based on the categories found in the first phase of the analysis, the first author coded the interviews to determine combinations that were formed. A total of 11 profiles were identified. After a discussion among the three authors, categories having limited or problematic descriptions of practical academic competences, as well as low or no confidence, were combined to reduce the number of profiles. Agreement on the coding and the profiles between all three authors was high. The profiles were formed based on graduates' evaluations of their academic competences and confidence in their success in working life because these were the elements most clearly distinguishable in the different profiles. After creating the final profiles they were explored in relation to graduates' evaluations of the usefulness of their work experience. In addition, graduates' background information, such as their major, the nature of the work experience (e.g., academic work or non-academic work), and previous education, was analysed in greater detail to find explanations for the differences between the profiles.

## Results

The results revealed variation in graduates' evaluations of their academic competences, confidence in success in future working life and how useful graduates' saw their work experience to be for their studies. Next, the variation in each theme is presented in detail. Table 1 summarises the variation in the themes.

Table 1. Variation in evaluations of academic competences, confidence in success in working life and the usefulness of work experience



---

1. Academic competences

1.1 Detailed analyses of demanding academic competences:

critical thinking, academic writing skills, development of one's own thinking , communication skills

1.2 Limited descriptions of practical academic competences

Practical skills mentioned (e.g. language skills, IT skills)

Only a few competences mentioned or no concrete examples mentioned

1.3 Difficulties describing academic competences

No competences mentioned

2. Confidence in success in working life

2.1 High confidence in success in working life

2.2 Low confidence in success in working life

2.3 No confidence in success in working life

3. Usefulness of work experience for studies

3.1 High-level cognitive benefits (e.g. application of knowledge, development of one's own thinking)

3.2 Practical benefits (e.g. time management, social skills, enhanced motivation)

3.3 No benefits mentioned

---

***Evaluations of academic competences***

The graduates provided various qualitatively different evaluations of how their competences had developed during their university studies. The first category consisted of detailed analyses and evaluations of demanding academic competences. Competences such as acquisition of knowledge, application of knowledge and critical-thinking skills were mentioned most often. In addition, evaluations of the development of one's own thinking, the ability to analyse different options, and being able to think more broadly were mentioned. Collaboration and communication skills including oral-presentation and writing skills were also mentioned, among others. The following extract is typical of such descriptions:

Well, I think that the studies have developed my competences quite well – for example, my own thinking and my ability to see different perspectives, analyse and bring something

new, and also my ability to think critically. All have been developed. (Agricultural sciences)

The second category consisted of limited descriptions and evaluations of practical academic competences. These evaluations revealed that graduates were able to describe their competences narrowly. Only a few competences were mentioned, usually practical ones such as language and information technology skills. Thus, compared to the previous category, these evaluations focused more on practical skills than higher-level cognitive competences, as in the following extract:

Well it is quite limited, or at least it is difficult for me to analyse. Probably basic language skills and IT skills. My studies were not practical in a way that I could somehow directly say that these were the working life competences that were taught. (Humanities)

Moreover, there were also vague evaluations to the effect that graduates had acquired certain competences but were unable to provide concrete examples of them:

I believe that if I get a job in my own academic field, I have competences to work or at least I have a degree. (Humanities)

The third category consisted of evaluations which reflected difficulties in describing any academic competences acquired during studies. Some evaluations even revealed that students had developed no generic competences while at university:

Well, I was thinking about this before and unfortunately I have to say that nothing [no academic competences have been developed] (Humanities)

There were claims that university studies were extremely theoretical and therefore evaluations to the effect that students had not developed any useful competences for working life. Moreover, in some descriptions, having difficulty analysing competences and skills was expressed:

At this point, I probably cannot analyse what I have learned when I was doing my master's thesis, what I learned from doing it. (Humanities)

### ***Confidence in success in working life***

Although the graduates' evaluations did reveal differences with regards to confidence in success in working life, most evaluations showed high confidence. Moreover, the evaluations revealed very realistic views of working life. Evaluations showing high confidence were given even if competition in the labour market was considered to be intense. Evaluations in this category also emphasised self-confidence and flexibility in order to manage the demands of work, as the following extract shows:

Yes, of course you need to have such capabilities that you would dare to say that you know your own limits if you are not able to do something ... of course, the economic situation at the moment worries me, and in fact, layoffs are going to begin in our workplace ... I do feel that I certainly can find some kind of job, and if necessary I can change fields ... So, self-assurance and self-confidence are really important to have. (Humanities)

There were also evaluations which revealed low confidence concerning success in working life, such as:

Well, on the one hand, I feel that I know some things. But then somehow if I now look at my qualifications that I have from the schools, I think that I don't have any proper knowledge or any kind of profile that someone out there is looking for. So I'm a bit worried about that. Especially now when I have to search for a job. (Humanities)

Well, sometimes I have and sometimes I don't have [confidence]. It depends on the day (laughs). Sometimes I am really excited and so on ... For a long time I have been a bit terrified. And even when I had the degree done I intentionally prolonged it because there was nothing [no work]. (Humanities)

Some evaluations showed no confidence because graduates had no work experience in their own academic field:

Maybe I have low self-esteem or self-confidence in my own abilities at the moment ... I'm afraid that I sound too pessimistic in terms of working life ... Perhaps it's just because I don't have a job in my own field and I feel that it is so hard to get ... But time will tell. Maybe then when you get a job, you realise that you can do this, that you have competences to do it, but before that ... (Humanities)

### *Usefulness of work experience for studies*

There was also variation in how graduates evaluated the usefulness of their work experience to their studies, and three categories emerged: high-level cognitive benefits, practical benefits and no perceived benefits. The first category consisted of descriptions of work experience helping students to link theory to practice, develop their ability to apply knowledge, or develop their own thinking. One graduate evaluated the usefulness of her work experience in the following way:

Well, of course, you can see how the theory can be applied to practice, and when you do practical work then you maybe remember these theories. And then when you learn a new theory, you are able to think about what kind of situations you can apply it to, so in that sense, of course it supports. (Social sciences)

Some evaluations in this category showed that working motivated students to study, and helped them to concentrate on what was essential. Moreover, the ability to see one's own strengths and weaknesses through work experience was mentioned, as below:

Well, yes, work motivated me quite a lot to study because when you do translation work for pay you take it more seriously... and you want to give the best image of your own professional skills, so of course it then motivates you to develop these skills. (Humanities)

In addition, some evaluations showed that working provided a different perspective on the studies and made them more meaningful:

You can direct your studies because you can see their relevance to working life ... and what kind of things can be useful. It makes studying more meaningful. (Humanities)

The second category comprised descriptions of the practical benefits of work experience. Most of the graduates' evaluations belonged in this category. The descriptions showed, for example, that working helped students to schedule their studies and use their time more effectively. Moreover, acquired time-management and social skills were mentioned. A few evaluations revealed work benefitting studies by providing data for course work or a master's thesis topic:

It gave me data that I could use in assignments, so I can say that there have been some practical benefits too. (Social sciences)

The third category comprised evaluations to the effect that work experience had no benefits for studies. Some evaluations mentioned work and studies being very different in nature, and therefore no connection could be made between them:

It's a different kind of job that is not related in any way to university studies. I have gained a lot of experience but it does not support my studies because it's so different (Humanities)

***Variation in graduates' evaluations at the individual level: graduate profiles***

After capturing the variation in the specific themes at the phenomenon level, we explored the kinds of combinations these themes formed at the individual level. Four profiles were formulated based on graduates' evaluations of academic competences and confidence in success in working life: rich descriptions/high confidence, rich descriptions/low confidence, limited descriptions/high confidence and limited descriptions/low confidence. The profiles were then examined in relation to graduates' evaluations of the usefulness of their work experience to their studies, and the results showed that the evaluations of the graduates in these profiles differed. The process of creating the profiles is illustrated in Figure 1. Graduates in all profiles had work experience from their own academic field: 81% of graduates representing rich descriptions and evaluations, and 77% of graduates representing limited descriptions and evaluations had work experience in their own academic field.

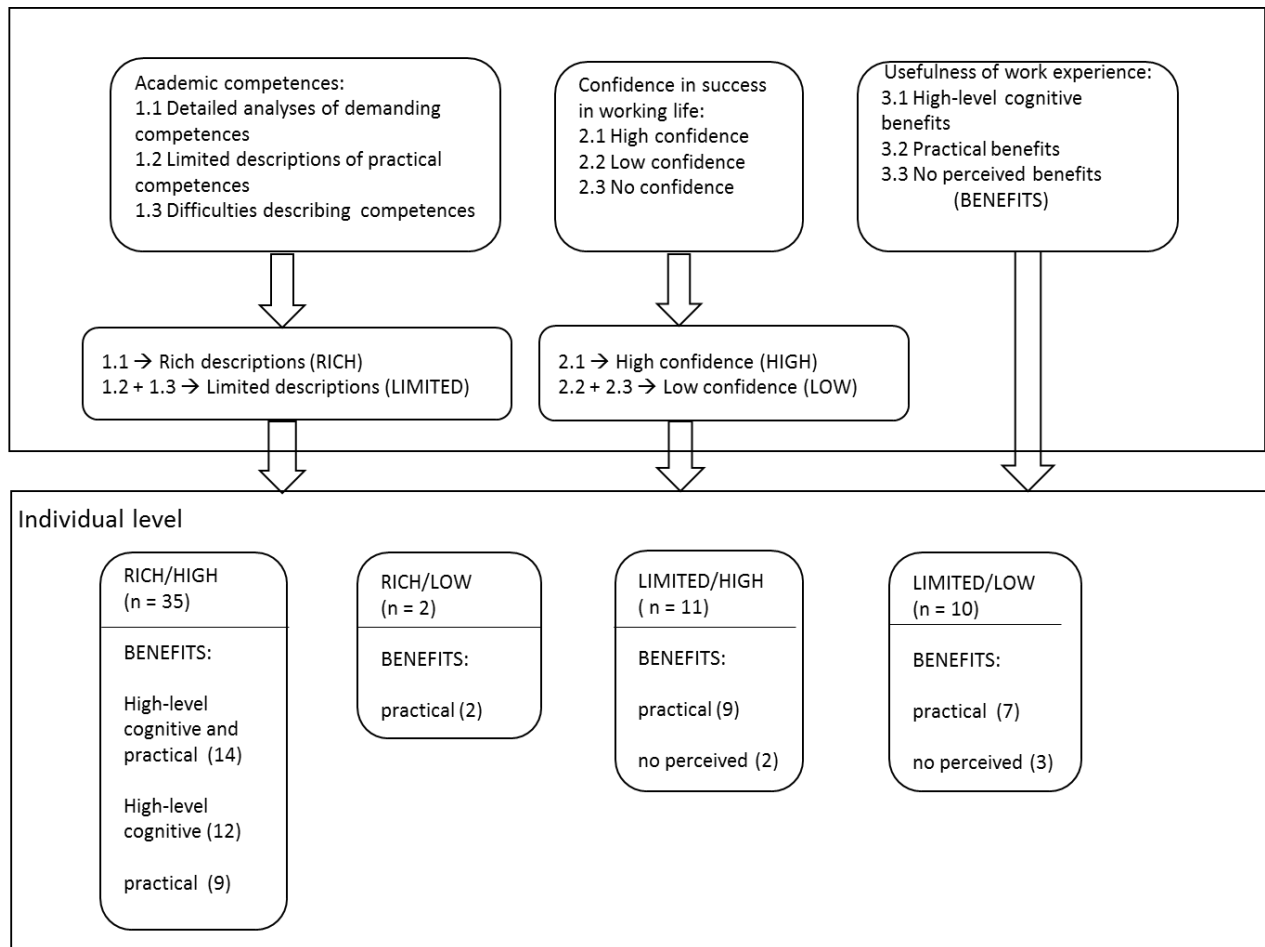


Figure 1. The process of creating the profiles: phenomenon- and individual-level analyses

The first profile, *Rich descriptions/high confidence*, represented graduates with rich descriptions and evaluations of academic competences as well as evaluations of high confidence in success in working life. These graduates were able to provide deep analyses of demanding competences and also mentioned a number of various competences. They also perceived their work experience as being beneficial to their studies. However, the graduates differed in the kinds of benefits they described. Almost half perceived both high-level cognitive and practical benefits. There were also graduates who reported either high-level cognitive or practical benefits. The second profile, *Rich descriptions/low confidence*, consisted of graduates with rich descriptions of academic competences. They reported practical benefits from work but had low confidence in their success in working life.

The third profile, *Limited descriptions/high confidence*, consisted of graduates with limited descriptions of practical competences and showing high confidence in success in working life. Most of these graduates described practical benefits of their work experience. However, two graduates in this profile were unable to describe any benefits of their work experience. In the fourth profile, *Limited descriptions/low confidence*, graduates also varied regarding their evaluations of the usefulness of work to their studies. Some graduates reported practical benefits of work experience and others were unable to describe any benefits of their work experience.

### ***Differences in current work situation between the profiles***

We also explored whether differences existed between the profiles concerning the graduates' work situations at the time of their graduation (see Table 2). The results revealed that most of the graduates in the profile *Rich/high* had a job by the time of their graduation. In addition, most had a job which corresponded to their degree. A total of four of 31 graduates in this profile were looking for a job which corresponded to their degree. Only four graduates were unemployed and seeking a job. The two graduates representing the profile *Rich/low* differed from each other: one had a job related to his academic degree, and the other was unemployed. In the profile *Limited/high*, nine graduates had a job at the time of their graduation but three were looking for another job that related to their academic degree and two graduates were unemployed. The profile *Limited/low* featured greater variation in the graduates' current working situation than did the other profiles: seven graduates had a job, but of these, two were in work that was unrelated to their academic studies. As well, two graduates were unemployed and one was continuing with another Master's degree.



Table 2. Work situation of profiles at time of graduation

	Rich/high	Rich/low	Limited/high	Limited/low
Had a job at time of graduation	31	1	9	7
Unemployed at time of graduation	4	1	2	2

## Discussion

The present study explored the elements of employability from graduates' perspectives at the time of graduation. The results showed variation between the graduates' perceptions of their academic competences, confidence in success in working life and usefulness of their work experience to their studies. We now focus on the profiles in order to discuss the meaning of the results in more detail, and because they also include the variation within categories. The results revealed four profiles which differed in terms of evaluations. The first profile represented graduates with *rich descriptions and high confidence* in success in working life. These graduates were able to describe various demanding competences and provide detailed analyses of them, and had high confidence in success in working life. Similarly, graduates from political science stated that their critical thinking as well as analytical and communication skills had developed while at university (Abrandt Dahlgren et al. 2006). These graduates with *rich descriptions/high confidence* were also able to describe different benefits of their work experience. Most perceived high-level cognitive benefits, such as being able to apply knowledge to practice and develop their own thinking. Practical benefits were also mentioned, such as the development of time-management and social skills. The resulting profiles replicated previous studies showing that the ability to link theory to practice (Trede & McEwen 2015; Shaw & Ogilvie 2010) as well as problem-solving and

communication skills (Crebert et al. 2004) were developed through students' work experience. Thus, graduates in the profile *rich descriptions and high confidence* were able to reflect on their competences acquired in different contexts. In other words, they were able to transfer those skills to another context, which usually requires students to have high-level learning skills and opportunities to apply their knowledge (Bennett, Dunne & Carré 1999). In working life there is a need for experts who are able to integrate material from different sources, combine new knowledge to prior knowledge and apply knowledge differently in different situations (Kirby et al. 2003). These are some of the elements of a deep approach to learning, which means students' endeavoring to understand the subject matter by analysing it and relating new material to knowledge already acquired (Entwistle 2009; Entwistle & Peterson 2004). Research has indicated a positive relationship between generic skills and a deep approach to learning (Kreber 2003; Lizzio, Wilson & Simons 2002). Thus, it seems that the graduates here with rich descriptions and evaluations of academic competences were applying a deep approach to learning because they were able to describe various competences and perceived high-level cognitive benefits of their work experience for their studies.

The second profile represented graduates with *rich descriptions and low confidence*, who reported that the reason for their low confidence was their lack of academic work experience in their own study field and that they were consequently unsure whether they had the competences to succeed in working life. It might also be the case that these graduates were very analytical and critical, and because they had no academic work experience, were uncertain about, and critical of, their competences. However, it should be noted that there were only two graduates in this profile.

Two other profiles – *limited descriptions/high confidence* and *limited descriptions/low confidence* – consisted of graduates with limited descriptions, but differed as to whether they had high or low

confidence. Compared to the graduates within rich profiles, graduates with limited profiles perceived no higher-level cognitive benefits of their work experience, although some had academic work experience in their own study field. However, only practical benefits of work experience were perceived in both rich and limited profiles. This is in line with previous research showing that students had difficulties identifying skills learned at work and transferring them to another context (Marshall & Cooper 2001). Common to these two limited profiles was graduates who described practical benefits of work and graduates who mentioned no benefits. Graduates in the profile *limited descriptions/high confidence* had limited descriptions of their academic competences but still high confidence concerning success in working life. These graduates said that because of their work experience, or because they had a job when they graduated, they had high confidence in success in working life. This is line with research which has found that work experience enhanced students' confidence (Ehiyazaryan & Barraclough 2009; Shaw & Ogilvie 2010). Research has also shown that students with work experience were more confident about entering working life, that they had higher expectations of job security (Oliver 2011), and that their work experience helped them to choose a career and succeed in entering it (Shaw 2012). The results of the present study indicate that graduates with high confidence in success in working life most often were employed in academic work in own study field at the time of graduation. However, there is a possibility of bias here due to the fact that students with jobs at the time of transition might have found it easier to be confident about working life success compared to their unemployed counterparts.

One reason for graduates perceiving that they had not gained any competences from working life might be that they already had a significant amount of work experience and competences. Because they had had a long working history, they might have thought that university studies did not provide them with any new skills or competences, or they might have had different study

objectives. In addition, previous research has shown students not seeing both the importance of developing skills and the benefits of these skills for their employability (Greenbank, Hepworth & Mercer 2009). Further, it has been found that students in different situations can understand employability in different ways. For example, for older students with work experience, the emphasis on employability can mean the development of a subject-specific understanding that complements what they have learned, whereas for young students entering university it can mean developing beyond the discipline (Knight & Yorke 2002).

The variation between the participants' evaluations indicates differences in their metacognitive skills. Graduates with rich descriptions and evaluations seem to have had better metacognitive skills because they were able to analyse their competences more thoroughly. On the other hand, some graduates were unable to reflect on their own abilities, and it might be the case that the graduates with limited descriptions were lacking in metacognitive skills. Lindblom-Ylänne (2003) showed that first- and second-year law students had difficulty evaluating their studying practices and the quality of their learning; in other words they lacked metacognitive skills. Our study indicates that graduates in the transition phase may have the same kind of difficulty as students at the beginning of their studies.

A few graduates had limited descriptions and high confidence even though they were unable to see the usefulness of their work experience. These graduates had either work experience in their own academic field or a previous education and profession in a practical field. Some with a background in vocational education and a practical field might have been used to learning in a more practical way. However, the results showed graduates in other profiles also mentioning that they would like more practice in their studies and that studies were too theoretical. Similarly, Ruohoniemi and Lindblom-Ylänne (2009) found that students in a professional discipline

emphasised the role of the practical side of their studies and the importance of knowing how to apply acquired knowledge to practice.

The use of qualitative methods revealed a variation in the graduates' evaluations and also differences in their metacognitive skills. Most of the research to date has explored the development of competences and skills through surveys (e.g. Sleaf & Reed 2006, Vaatstra & De Vries 2007). The present study showed that when graduates were asked about their academic competences not all were able to describe them, or they provided limited descriptions. In many studies, students have given high scores in terms of academic competences and skills gained, resulting in a skewed variance (Arnold et al. 1999; Sleaf & Reed 2006; Vaatstra & De Vries 2007). This therefore raises the question of whether students answer these questionnaires on the basis of their own opinion or instead on what they think would be the "right" answer. This would be important to explore in more detail.

The results of the present study are in line with employability models which emphasise that acquiring and recognising competences are related to high self-efficacy beliefs (Knight & Yorke 2002; Bennett, Dunne & Carré 1999). In the present study, most of the graduates had rich descriptions and evaluations of their academic competences, and confidence in succeeding in working life. In addition, the role of metacognition and self-efficacy was emphasised.

Metacognition is important because without the ability to reflect on one's competences, graduates remain unaware of the competences they may have, and, further, are unable to perceive the usefulness of their work experience. This is crucial in the transition phase in order to gain employment after graduation, as emphasised in the USEM model (Knight & Yorke 2002). It was worrying that graduates with *limited descriptions and low confidence* in this crucial phase were found. Moreover, it was notable that graduates with otherwise similar profiles differed in their

levels of confidence. It seems that supporting metacognitive skills and sense of confidence is important in enhancing students' employability, and that this should be emphasised more at university. The present study has three practical implications that may help students in the transition phase. Firstly, emphasising the importance of acquiring different academic competences during studies and stressing to students the usefulness of these competences in future working life could help them to develop and recognise competences (e.g. Davies 2000). An activating learning environment involving problem-based or project-oriented learning has been found to facilitate the development of competences (Schaeper 2009; Vaatstra & De Vries 2007). This would similarly not only support students' metacognitive skills but also their study processes in general, which has been shown to be related to working life as well. Tuononen and colleagues (2015) showed that students' study processes, especially their ability to search for understanding and create meaning, are related to their academic work. Secondly, students should be encouraged to reflect on their work experience and integrate it into their studies (Davies 2000) and be supported when doing so. Thirdly, it would be worth teaching students how to articulate their employability as well as take advantage of their real-world experience (Ehiyazaryan & Barraclough 2009). Employability should be made more explicit to students already during their studies, so that they are better prepared to enter working life.

## References

- Abrandt Dahlgren, M, Hult, H, Dahlgren, LO, Hård af Segerstad, H & Johansson, K 2006, 'From senior student to novice worker: learning trajectories in political science, psychology and mechanical engineering' *Studies in Higher Education*, vol. 3, no. 5, pp. 569–586.
- Arnold, J, Loan-Clarke, J, Harrington, A & Hart, C 1999, 'Students' perceptions of competence development in undergraduate business-related degrees', *Studies in Higher Education*, vol. 24, no. 1, pp. 43–59.
- Bandura, A 1997, *Self-efficacy. The exercise of control*, Freeman Company, New York.
- Bandura, A 1977, 'Self-efficacy: Toward a unifying theory of behavioral change', *Psychological Review*, vol. 84, no. 2, pp. 191–215.
- Bennett, N, Dunne, E & Carré, C 1999, 'Patterns of core and generic skill provision of higher education', *Higher Education*, vol. 37, no. 1, pp. 71–93.

- Bergman, LR & Magnusson, D 1997, 'A person-oriented approach in research on developmental psychopathology', *Development and Psychopathology*, vol. 9, no. 2 pp. 291–319.
- Braun, EMP, Sheikh, H & Hannover, B 2011, 'Self-rated competences and future vocational success: a longitudinal study', *Assessment & Evaluation in Higher Education*, vol. 36 no. 4, pp. 417–427.
- Brown, P, Hesketh, A & Williams, S 2003, 'Employability in a knowledge-driven economy', *Journal of Education and Work*, vol. 16, no. 2, pp. 107–126.
- Crebert, G, Bates, M, Bell, B, Patrick, C-J & Granolini, V 2004, 'Developing generic skills at university, during work placement and in employment: graduates' perceptions', *Higher Education Research & Development*, vol. 23, no. 2, pp.147–165.
- Davies, L 2000, 'Why kick the "L" out of learning? The development of students' employability skills through part-time working', *Education + Training*, vol. 42, no. 8, pp. 436–444.
- DiPerna, JC & Elliott, SN 1999, 'Development and validation of the academic competence evaluation scales', *Journal of Psychoeducational Assessment*, vol.17, pp. 207–225.
- Dunne, E, Bennett, N & Carré, C 2000, 'Skill development in higher education and employment', in F. Goffield (ed.), *Differing visions of a learning society. Research finding volume 1*, The Policy Press, Bristol.
- Ehiyazaryan, E & Barraclough, N 2009, 'Enhancing employability: integrating real world experience in the curriculum', *Education + Training*, vol. 51, no. 4, pp. 292–308.
- Elo, S & Kyngäs, H 2007, 'The qualitative content analysis process', *Journal of Advanced Nursing*, vol.62, no. 1, pp. 107–115.
- Entwistle, N 2009, *Teaching for Understanding at University. Deep approaches and distinctive ways of thinking*. Palgrave MacMillan: Basingstoke.
- Entwistle, NJ, & Peterson, ER 2004, 'Conceptions of learning and knowledge in higher education: Relationships with study behaviour and influences of learning environments', *International Journal of Educational Research*, vol. 41, no 6, pp. 407–428.
- Gedye, S, Fender, E & Chalkley, B 2004, 'Students' undergraduate expectations and post-graduation experiences of the value of a degree', *Journal of Geography in Higher Education*, vol. 28, no. 3, pp. 381–396.
- Greenbank, P, Hepworth, S & Mercer, J 2009, 'Term-time employment and the student experience', *Education + Training*, vol. 51, no. 1, pp.443–455.
- Harvey, L 2001, 'Defining and measuring employability', *Quality in Higher Education*, vol. 7, no. 2, pp. 97–109.
- Johnston, B 2003, 'The shape of research in the field of higher education and graduate employment: some issues', *Studies in Higher Education*, vol. 28, no. 4, pp. 416–426.?
- Kavanagh, MH & Drennan, L 2008, 'What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations', *Accounting and Finance*, vol. 48, no. 2, pp. 279–300.
- Kirby, JR, Knapper, CK, Evans, CJ, Carty, AE & Gadula, C 2003, 'Approaches to learning at work and workplace climate', *International Journal of Training and Development*, vol. 7, no. 1, pp. 31–52.
- Knight, PT & Yorke, M 2003, *Assessment, learning and employability*, Open University Press, Berkshire.



- Knight, PT. & Yorke, M 2002, 'Employability through the curriculum', *Tertiary Education and Management*, vol. 8, pp. 261–276
- Kreber, C 2003, 'The relationship between students' course perception and their approaches to studying in undergraduate science courses: a Canadian experience', *Higher Education Research and Development*, vol. 22, no. 1, pp. 57–75.
- Lindblom-Ylänne, S 2003, 'Broadening an understanding of the phenomenon of dissonance', *Studies in Higher Education*, vol. 28, no. 1, pp. 63–77.
- Lizzio, A, Wilson, K & Simons, R 2002, 'University students' perceptions of the learning environment and academic outcomes: implications for theory and practice' *Studies in Higher Education*, vol. 27, no. 1, pp. 27–52.
- Marshall, I & Cooper, LS 2001, 'Earning academic credit for part-time work', In D. Boud & N. Solomon (eds). *Work-based learning. A new higher education?* Open University Press, Buckingham.
- Mason, G, Williams, G & Cranmer, S 2009, 'Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes?', *Education Economics*, vol. 17, no. 1, pp. 1–30.
- Moynihan, LM, Roehling, MV, LePine, MA & Boswell, WR 2003, 'A longitudinal study of the relationships among job search self-efficacy, job interviews, and employment outcomes', *Journal of Business and Psychology*, vol. 18, no. 2, pp. 207–233.
- McQuaid, RW & Lindsay, C 2005, 'The concept of employability', *Urban Studies*, vol. 42, no. 2, pp. 197–219.
- Oliver, D 2011, 'University student employment and expectations of the graduate labour market', *Journal of Industrial Relations*, vol. 53, no. 1, pp.123–131.
- Ruohoniemi, M & Lindblom-Ylänne, S 2009, 'Students' experiences concerning course workload and factors enhancing and impeding their learning – a useful resource for quality enhancement in teaching and curriculum planning' *International Journal of Academic Development*, vol. 14, no. 1, pp. 69–81.
- Schaeper, H 2009, 'Development of competencies and teaching-learning arrangements in higher education: findings from Germany', *Studies in Higher Education*, vol. 34, no. 6, pp. 677–697.
- Shaw, A J 2012, 'The value of work experience in outcomes for students: an investigation into the importance of work experience in the lives of female undergraduates and postgraduates job seekers', *Journal of Vocational Education and Training*, vol. 64, no. 2, pp. 155–168.
- Shaw, S & Ogilvie, C 2010, 'Making a virtue out of a necessity: part time work as a site for undergraduate work-based learning', *Journal of European Industrial Training*, vol. 34, no. 8/9, pp. 805–821.
- Sleap, M & Reed, H 2006, 'Views of sport science graduates regarding work skills developed at university', *Teaching in Higher Education*, vol. 11, no. 1, pp. 47–61.
- Smith, K., Clegg, S., Lawrance, E. & Todd, M.J. (2007). The challenges of reflection: students learning from work placements. *Innovations in Education and Teaching International*, 44(2), 131–141.
- Strijbos, J, Engels, N & Struyven, K 2015, 'Criteria and standards of generic competences at bachelor degree level: A review study', *Educational Research Review*, vol. 14, pp. 18–32.



- Trede, F & McEwen, C 2015, 'Early workplace learning experiences: what are the pedagogical possibilities beyond retention and employability?' , *Higher Education*, vol. 69, pp. 19–32.
- Tuononen, T, Parpala, A, Mattsson, M, & Lindblom-Ylänne, S 2015, 'Work experience in relation to study pace and thesis grade: investigating the mediating role of student learning', *Higher Education*, pp. 1–18.
- Vaatstra, R & De Vries, R 2007, 'The effect of the learning environment on competences and training for the workplace according to graduates', *Higher Education*, vol. 53, pp. 335–357.